CLAIMS

What is claimed is:

1. A system, comprising:

a computer device;

a heat sink coupled to the computer device and conforming to a plurality of components disposed on the computer device; and

a compliant material flexibly engaging the heat sink against the plurality of components.

2. The system of claim 1, wherein the computer device comprises a circuit board and each of the plurality of components extends to a different height on the circuit board.

3. The system of claim 1, comprising a fastener adapted to compress the compliant material between the heat sink and the plurality of components.

4. The system of claim 1, wherein the heat sink comprises a stiffening rib.

5. The system of claim 1, wherein the compliant material has a thermal resistance of less than 10 degrees Celsius-square centimeter per Watt.

6. The system of claim 1, wherein the heat sink comprises first, second, and third mounting fasteners in a triangular configuration.

7. A system, comprising:

a rack; and

a device mounted in the rack, the device comprising:

a plurality of components;

a heat sink having an interface spanning the plurality of components; and

a flexible thermal interface material disposed between the heat sink and the plurality of components.

8. The system of claim 7, comprising at least one tool-free mount mechanism mounting the heat sink to the device.

9. The system of claim 8, wherein the device comprises a computer server.

10. The system of claim 8, wherein the flexible thermal interface material comprises a pad having an adhesive surface.

11. The system of claim 8, wherein the flexible thermal interface material has a thermal resistance of less than 10 degrees Celsius-square centimeter per Watt.

12. The system of claim 8, wherein the plurality of components comprise an electronic component having a power rating of less than 15 Watts.

13. A heat sink, comprising:

a base comprising a plurality of protruding members and a mounting surface adapted to span a plurality of electronic components; and

a flexible thermal interface material disposed on the mounting surface, wherein the flexible thermal interface material is adapted to interface the heat sink flexibly with the plurality of electronic components.

14. The heat sink of claim 13, wherein the heat sink comprises first, second, and third mounting fasteners disposed in a triangular configuration.

15. The heat sink of claim 13, wherein the heat sink comprises a stiffening member extending lengthwise along the base.

16. The heat sink of claim 13, wherein the heat sink comprises at least one tool-free mounting mechanism.

17. The heat sink of claim 13, wherein the flexible thermal interface material has a thickness of less than 2 millimeters.

18. A system, comprising:

a circuit board having a heat sink spanning multiple components on the circuit board; and

at least one compliant pad flexibly interfacing the heat sink with the multiple components.

19. The system of claim 18, wherein the heat sink has an interface structure that conforms to contact surfaces on the multiple components.

20. The system of claim 19, wherein the interface structure comprises surfaces disposed at different heights, which substantially align with contact heights of the contact surfaces relative to the circuit board.

21. A method, comprising:

providing a heat sink having a mounting interface adapted to span at least two components of an electronic device; and

providing a compliant material adapted to interface the heat sink flexibly with the at least two components.

22. The method of claim 21, comprising providing a tool-free mounting mechanism for mounting the heat sink to the electronic device.

23. The method of claim 21, wherein providing the compliant material comprises adhering a thermally conductive pad to the mounting interface.

24 The method of claim 21, wherein providing the compliant material comprises mounting a pad having a thermal resistance of less than 10 degrees Celsius-square centimeter per Watt.

25 A system, comprising:

means for spanning a heat sink over a plurality of electronic components; and

means for flexibly and thermally interfacing the heat sink with the plurality of components.